

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

FIRE KING INTERNATIONAL, LLC

Plaintiff,

VS.

TIDEL ENGINEERING, L.P.

Defendant.

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NO. 3-07-CV-0655-G

**FINDINGS AND RECOMMENDATION OF THE
UNITED STATES MAGISTRATE JUDGE**

Plaintiff Fire King International, LLC has sued Defendant Tidel Engineering, L.P. for infringement of U.S. Patent No. 7,063,252 ("the '252 Patent"). Both sides now seek construction of the disputed claim terms. Having considered the claim language, the patent specification, the prosecution history, and the other evidence and briefing submitted by the parties, the magistrate judge issues the following claim construction recommendation.

I.

Plaintiff is the owner by assignment of the '252 Patent, entitled "Centralized Electronic Safe and Accounting Control System," which claims an electronic lock and money control system such as used by merchants to collect and dispense money. The invention includes at least one safe equipped with an interior compartment for securing money, an outer door having an electronic lock mechanism to control access to the interior compartment, a data input device, an electronic display, a connector interface mounted to the housing, and a processor programmed to control the electronic lock. The invention may also include bill validators and cash dispensing devices. The patented safe may operate as a single, stand-alone unit or in a network of multiple units. When multiple safes are

arranged in a network, one safe operates as the centralized network controller for the remote safes and other network devices. (See Plf. Cl. Const. App., Exh. 1 at 4 & 10, col. 1, ll. 40-67, col. 2, ll. 1-34).

In this lawsuit, plaintiff alleges that certain products manufactured and sold by defendant under the "Sentinel" brand name infringe one or more claims of the '252 Patent. (See Plf. Am. Compl. at 4-9, ¶¶ 15-28). Defendant denies any infringement and maintains that the patent in-suit is invalid for a variety of reasons. (Def. Am. Ans. at 45, ¶¶ 15-28 & 8-10).

II.

The threshold issue in any patent infringement case is claim construction. Here, the parties have a fundamental disagreement as to the number of safes required for the patented system, whether the central system controller must be inside the safe, whether the connector interface must be attached to the outside of the safe, and whether any remote safes may have a processor.

A.

"A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using, or selling the protected invention." *Corning Glass Works v. Sumitomo Electric U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989). Claim construction is a question of law for the court to decide. See *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372, 116 S.Ct. 1384, 1387, 134 L.Ed.2d 577 (1996). The words of a claim "are generally given their ordinary and customary meaning." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005), *cert. denied*, 126 S.Ct. 1332 (2006), *quoting Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Ordinary and customary meaning is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention[.]" *Id.* at 1313. When the ordinary and customary meaning of a term is not readily apparent, "the court looks to 'those

sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean." *Id.* at 1314, quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004). Those sources include the words of the claims themselves, the patent specification, the prosecution history, and extrinsic evidence. *Id.*; see also *Vitronics*, 90 F.3d at 1582.

The ordinary meaning of a claim term cannot be determined in a vacuum. *Phillips*, 415 F.3d at 1315; see also *Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005). Rather, patent claims "must be read in view of the specification, of which they are a part." *Phillips*, 415 F.3d at 1315, quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff'd*, 116 S.Ct. 1384 (1996). The specification is always highly relevant to the claim construction analysis and, thus, is the primary basis for construing the claims. *Id.* The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication. *Vitronics*, 90 F.3d at 1582. The court also may consider the prosecution history in determining the meaning of disputed claim terms. *Id.* at 1582-83; see also *CVI/Beta Ventures, Inc. v. Tura LP.*, 112 F.3d 1146, 1158 (Fed. Cir. 1997), *cert. denied*, 118 S.Ct. 1039 (1998). The prosecution history contains a complete record of all proceedings before the Patent and Trademark Office ("PTO"), including any express representations made by the applicant regarding the scope of the claims. *Vitronics*, 90 F.3d at 1582. Because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and may be less useful for claim construction purposes. Nonetheless, "the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the

claim scope narrower than it would otherwise be." *Phillips*, 415 F.3d at 1317, *citing Vitronics*, 90 F.3d at 1582-83.

While most patent claims can be construed solely on the basis of intrinsic evidence, extrinsic evidence may be considered "for background and education on the technology implicated by the presented claim construction issues." *Key Pharmaceuticals v. Hercon Laboratories Corp.*, 161 F.3d 709, 716 (Fed. Cir. 1998). Extrinsic evidence consists of all evidence external to the patent and the prosecution history, including expert and inventor testimony, dictionaries, and learned treatises. *Markman*, 52 F.3d at 980; *see also Vitronics*, 90 F.3d at 1583. Although extrinsic evidence is generally less reliable and less probative than intrinsic evidence, it may assist the court in better understanding the underlying technology and the way in which one skilled in the art might use the claim terms. *Phillips*, 415 F.3d at 1318. However, the court must discount any extrinsic evidence "that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent." *Id.*, *quoting Key Pharmaceuticals*, 161 F.3d at 716.

B.

Claim 1 of the '252 Patent claims:

An electronic lock and money control system comprising:

at least one safe comprising:

a housing having an interior compartment for securing money, and an outer door having an electronic lock mechanism to control access to the interior compartment;

a data input device;

an electronic display;

a connector interface mounted to the housing; and

a control system arranged to communicate with the data input device, electronic display, connector interface and electronic lock mechanism, wherein the control system includes a processor programmed to control operation of the electronic lock, as well as operate as *a central system controller* when connected to at least one other *remote safe* via the connector interface to monitor and accumulate financial and operational information for each remote unit.

(Plf. Cl. Const. App., Exh. 1 at 14, col. 10, ll. 59-67 & 15, col. 11, ll. 1-10) (emphasis added). Claim 11 of the '252 Patent claims:

A network of interconnected electronic locking and money control devices comprising:

a central processing system *integrated with* one of the electronic locking and money control devices and arranged to control operation of the integrated device, wherein the central processing system is connected to all *other network devices*, and further arranged to communicate with all the *other network devices* and provide network control of all the other devices.

(*Id.*, Exh. 1 at 15, col. 12, ll. 4-12) (emphasis added). In their claim construction briefs, both parties seek construction of the terms "a connector interface mounted to the housing," "a central system controller," and "remote safe," which appear in claim 1, and the terms "integrated with" and "other network devices," which appear in claim 11. Defendant also seeks construction of the term "an electronic lock and money control system," which appears in the preamble of claim 1.

1.

The court first determines whether the term "an electronic lock and money control system," as used in the preamble of claim 1, requires construction. Defendant argues that the term should be interpreted as a limitation requiring at least two safes -- a main safe and at least one remote safe.

(See Def. Cl. Const. Br. at 16). Plaintiff counters that the term is intended to describe the purpose of the invention claimed in claim 1 and is non-limiting in nature. (See Plf. Cl. Const. Br. at 13; Plf. Resp. Br. at 13).

Preamble language that merely states the purpose or intended use of an invention is generally not treated as limiting the scope of the claim. *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 952 (Fed. Cir. 2006). There is no "litmus test" for determining whether preamble language is limiting. *Id.* Rather, the decision whether to treat a preamble as a claim limitation is informed by "the facts of each case in light of the claim as a whole and the invention described in the patent." *Id.*, quoting *Storage Technology Corp. v. Cisco Systems, Inc.*, 329 F.3d 823, 831 (Fed. Cir. 2003). A preamble can be a limitation on an invention if it recites essential structure or steps, or if it is "necessary to give life, meaning, and vitality" to the claim. See *Catalina Marketing Int'l, Inc. v. Coolsaving.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002).

Here, the preamble of claim 1 merely gives an overview of the invention subsequently described in the body of the claim. It does not offer any details, structure, or description that would aid one skilled in the art in understanding what is covered by claim 1. The body of the claim fully and intrinsically recites a complete invention without reference to any definitions or features described in the preamble. Because the preamble does not constitute or explain a claim limitation, it is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999); see also *Restaurant Technologies, Inc. v. Jersey Shore Chicken*, No. 05-5356-MLC, 2007 WL 446910 at *9 (D. N.J. Feb. 6, 2007); *Echometer Co. v. Lufkin Industries, Inc.*, No. 7:00-CV-0101-R, 2003 WL 21768011 at *3 (N.D. Tex. Jul. 31, 2003).¹

¹ Although the term "an electronic lock and money control system" has no significance to claim construction, the court feels compelled to note that the '252 Patent does not require at least two safes as suggested by defendant. The specification clearly and unambiguously states that "the present invention provides an electronic lock and money control

Plaintiff and defendant seek construction of the term "a connector interface mounted to the housing" as used in claim 1. Both parties agree that term describes a system component that is "fixed to the housing" of a safe. (*See* Plf. Cl. Const. Br. at 16; Def. Cl. Const. Br. at 16; Def. Resp. Br. at 6). However, defendant insists that the "connector interface," which is comprised of input/output communications ports, must be externally accessible to allow for the addition or deletion of connectors for other remote safes. (*See* Def. Br. at 16; Def. Resp. at 6). Plaintiff maintains that the purpose of the "connector interface" is to enable the exchange of data between a computer and another entity, not to allow connectors to be added or deleted externally from the safe. (*See* Plf. Cl. Const. Br. at 15; Plf. Resp. Br. at 12).

The plain language of claim 1 identifies the "connector interface" as the system component that provides connectivity between the "control system" and one or more "remote safes." (Plf. Cl. Const. App., Exh. 1 at 15, col. 11, ll. 7-8). Claim 6, a dependent claim, states that the "connection interface" may consist of a "communications port to allow communication between the control system and a remote computer." (*Id.*, Exh. 1 at 15, col. 11, ll. 40-42). The patent specification further explains that a "wiring/connector interface panel" provides connections between the safe and various peripherals that may comprise the claimed system. (*Id.*, Exh. 1 at 11, col. 3, ll. 20-44). This "wiring/connector interface panel" may provide connection to (1) an external alarm system, (2) a power source, (3) an auxiliary power supply, (4) a modem, (5) a printer, and/or (6) one or more remote safes. (*Id.*, Exh. 1 at 11, col. 3, ll. 22-44). Figure 2 illustrates that, when arranged in a network configuration, the "wiring/connector interface panel" provides the data ports that connect

system having *at least one safe*" with certain components. (*See* Plf. Cl. Const. App., Exh. 1 at 10, col. 1, ll. 46-48) (emphasis added). To the extent defendant advocates a limitation requiring at least two safes, that argument should be rejected.

the central controller unit to multiple remote units in the system. (*Id.*, Exh. 1 at 5, Fig. 2). Any definition that limits this claim term solely to input/output communications ports or circumscribes its function to enabling the exchange of data is not supported by the claim language or the specification. The "connector interface" is a broader, more versatile component than suggested by either party. As a result, the court should construe the term "connector interface mounted to the housing" to mean a "component fixed to the housing of a safe that provides connectivity among various system components and network devices."

3.

Next, the parties seek construction of "a central system controller," as that term is used in claim 1. Both parties agree that the "central system controller" is a CPU or a processor that operates to control remote safes in the network. (*See* Plf. Cl. Const. Br. at 8; Def. Cl. Const. Br. at 11). Indeed, this construction is consistent with the plain language of claim 1, which states:

the control system includes a processor programmed to control operation of the electronic lock, as well as operate as *a central system controller* when connected to at least one other remote safe via the connector interface to monitor and accumulate financial and operational information for each remote unit.

(Plf. Cl. Const. App., Exh. 1 at 15, col. 11, ll. 4-10) (emphasis added). The parties also agree that the processor must be "part of the safe." (*See* Plf. Cl. Const. Br. at 9; Def. Cl. Const. Br. at 12). However, defendant urges that the central system controller must be physically located within a safe. (Def. Cl. Const. Br. at 11-12).

In support of its proposed definition, defendant argues that "the central system controller must be a part of the safe because the safe comprises, among other things, a control system." (*Id.* at 12). That the "central system controller" is a component or part of the claimed invention does not necessarily mean that the controller must be located within the safe. The court notes that the

invention is also comprised of a data input device and an electronic display. (Plf. Cl. Const. App., Exh. 1 at 14, col. 10, ll. 66-67). The specification describes one preferred embodiment where a keypad/display control panel can be mounted apart from the safe, such as on a counter near a cash register. (*Id.*, Exh. 1 at 12, col. 5, ll. 29-31; *see also id.*, Exh. 1 at 8, Fig. 8). Thus, not every component must be located within the safe merely because it is a component of the invention. The court further observes that, in describing another preferred embodiment, the specification states that the control system CPU is "preferably mounted behind a protected inner door within the unit." (*Id.*, Exh. 1 at 11, col. 3, ll. 18-19). Importantly, the specification reflects only a preference for the location of the CPU, not a requirement. It would be improper to construe such a preference as a mandatory claim limitation. *See Microsoft Corp. v. Multi-Tech Systems, Inc.*, 357 F.3d 1340, 1352 (Fed. Cir.), *cert. denied*, 125 S.Ct. 61 (2004) (improper to construe feature as necessary where specification describes it as merely desirable).

Defendant also relies on the doctrine of prosecution history estoppel to support its proposed claim construction. (*See* Def. Cl. Const Br. at 12). In discussions with the PTO, the applicant argued that the processor component of the claimed invention, which operates as the central system controller, is "part of the safe," whereas the central system controller described by the prior art was not part of any safe. (Def. Cl. Const. App. at 80). Defendant therefore maintains that plaintiff should be estopped from making any arguments to the contrary in this proceeding. The court rejects this estoppel argument for two reasons. First, prosecution history estoppel, which limits the doctrine of equivalents, applies only after patent claims have been properly interpreted. *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 30, 117 S.Ct. 1040, 1049, 137 L.Ed.2d 146 (1997); *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1438 (Fed. Cir.), *cert. denied*, 109 S.Ct. 542 (1988). It does not apply to claim construction. *AccuScan, Inc. v. Xerox*

Corp., 76 Fed. Appx. 290, 292, 2003 WL 22148905 at *1 (Fed. Cir. 2003), *cert. denied*, 124 S.Ct. 1419 (2004).² Second, while arguments made by an applicant to the PTO may be relevant to claim construction, *Phillips*, 415 F.3d at 1317, there is nothing in the prosecution history of the '252 Patent that indicates the inventor required the processor to be located within a safe. Rather, the prosecution history indicates only that it must be "part of a safe," rather than "a separate computer." (*See* Def. Cl. Const. App. at 55, 80). As the claim specification makes clear, a component – such as the display/keypad or even the processor – can be "part of" the safe without being physically located within the safe. Thus, plaintiff should not be estopped from arguing that the "central system controller" can be located outside the safe.

The court should construe the term "a central system controller" to mean "a processor that is part of the safe, though not necessarily internal to the safe, which operates to control remote safes in the network."

4.

The parties also seek construction of "integrated with," as that term is used in the phrase "a central processing system *integrated with* one of the electronic locking and money control devices," which appears in claim 11. Echoing the arguments made in support of its proposed construction of "a central system controller," defendant argues that "integrated with" means "internally connected to and part of the electronic locking and money control device[,], not separate." (Def. Cl. Const. Br. at 13). Plaintiff opposes any limitation that requires the central processing system to be physically located within a safe, arguing instead that the term "integrated with" should be given its ordinary meaning of "acting as part of." (*See* Plf. Cl. Const. Br. at 11).

² To the extent defendant relies on the doctrine of prosecution disclaimer, which excludes from claim construction any claim scope that has been clearly and unmistakably disavowed during prosecution, *see AccuScan*, 2003 WL 22148905 at *1, that doctrine does not apply because plaintiff did not "clearly and unmistakably" disavow a configuration where the central system controller is physically located outside of the safe.

The claim construction proposed by defendant, which is based entirely on its interpretation of statements made by the applicant to the PTO during prosecution of the '252 Patent, is unavailing. In attempting to distinguish the claimed invention from the prior art, the applicant explained to the patent examiner:

Host computer 4b in [the prior art] is not "integrated with one of the electronic locking and money control devices and arranged to control operation of the integrated device" in combination with the other recited limitations. Host computer 4b does perform certain host computer operations. Nevertheless, claim 11 recites a specific arrangement that is not suggested. After all, host computer 4b is not integrated with an electronic locking and money control device as required by claim 11.

(Def. Cl. Const. App. at 161-62). Nothing in this statement suggests that the central processing system must be internally connected to the safe. Nor does the claim language contain such a limitation. Instead, the claim requires only that the central processing system be "integrated with" a network safe and arranged to control the operation of the network safe and communicate with other network devices. The generally accepted definition of "integrated" is "combining or coordinating separate elements so as to provide a harmonious, interrelated whole." THE RANDOM HOUSE DICTIONARY OF THE ENGLISH LANGUAGE (1967). Neither party has adduced any evidence to suggest that a person of ordinary skill in the art would understand the term to have a different meaning. The court therefore should construe "integrated with" to mean "acting as part of."

5.

Finally, the parties seek construction of the terms "remote safe," as used in claim 1, and "other network devices," as used in claim 11. Defendant proposes the same construction of both terms--"a unit [or units] without a CPU [or] local control system located at a distance from the safe referenced above, i.e. a slave unit, which can include bill validators and cash dispensing apparatus."

(Def. Cl. Const. Br. at 14-15). Plaintiff argues that "remote safe" means "an electronic lock and money collection/dispensing unit physically remote from a first such unit," whereas "other network devices" means "devices, other than the central processing system, having unique network addresses and capable of communicating over a network." (Plf. Cl. Const. Br. at 12, 18).

a.

The parties have stipulated that a "safe" is a "stand alone electronic lock and money collection/dispensing unit." (*See* Plf. Cl. Const. App., Exh. 5 at 26). Further, the parties agree that the term "remote" should be construed as "physically remote" or "located at a distance from" the main safe. (*See* Plf. Cl. Const. Br. at 18; Def. Cl. Const. Br. at 14). Notwithstanding this agreement, defendant believes that "remote safes" are the same as "remote system units," which the specification describes as "units without a CPU/local control system." (Def. Cl. Const. Br. at 14; *see also* Plf. Cl. Const. App., Exh. 1 at 12, col. 5, ll. 65-66).

According to the specification, a remote safe can be a bill validator or a cash dispensing apparatus. (Plf. Cl. Const. App., Exh. 1 at 10, col. 2, ll. 13-14; *see also id.*, Exh. 1 at 9, Figs. 9 & 10). When functioning as a bill validator or cash dispensing machine, the remote safe may lack a processor. However, the specification clearly contemplates that a remote safe also can be a fully functional "electronic lock and money collection/dispensing unit" capable of stand-alone operation. (*Id.*, Exh. 1 at 10, col. 1, ll. 41-45). A stand-alone safe necessarily includes a control processor that operates the lock mechanism. (*Id.*, Exh. 1 at 11, col. 4, ll. 1-2). If the remote safe does not have a CPU or local control system, a limitation suggested by defendant, the remote unit could not operate as a stand-alone safe. Such a limitation is clearly contrary to the specification. The court therefore should construe the term "remote safe" to mean "an electronic lock and money collection/dispensing unit physically remote from a first such unit."

b.

Defendant's proposed construction of "other network devices" fails for the same reason. Claim 11 covers "[a] network of interconnected electronic locking and money control devices." (*Id.*, Exh. 1 at 15, col. 12, ll. 4-12). The parties have stipulated that "electronic locking and money control devices" are "devices and/or units (e.g. safes) that have at least one electronic lock and controls the receipt and/or dispensing of money." (*Id.*, Exh. 4 at 24). As previously discussed, remote safes in the network may or may not have a control processor that operates the lock mechanism. Thus, the court cannot limit the term "other network devices" to units without a CPU or local control system.

Plaintiff argues that "other network devices" means "devices, other than the central processing system, having unique network addresses and capable of communicating over a network." (*See* Plf. Cl. Const. Br. at 12). Defendant objects that this construction would render claim 12 superfluous, thereby violating the doctrine of claim differentiation.³ (*See* Def. Cl. Const. Br. at 15). Claim 12 of the '252 Patent, which is dependent of claim 11, claims:

[t]he network of claim 11 wherein the central processing system is arranged to automatically detect and assign network addresses for devices added to the network.

(Plf. Cl. Const. App., Exh. 1 at 15, col. 12, ll. 13-15). Although the patent specification makes clear that each device connected to the network has a unique address, it does not require addresses to be automatically assigned. Indeed, the addresses could be preset or manually determined. Claim 12

³ The doctrine of claim differentiation is based on "the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope." *Andersen Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1369 (Fed. Cir. 2007), *quoting Karlin Tech. Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72 (Fed. Cir. 1999). "To the extent that the absence of such difference in meaning and scope would make a claim superfluous, the doctrine of claim differentiation states the presumption that the difference between claims is significant." *Id.* at 1369-70, *quoting Tandon Corp. v. U.S. International Trade Comm'n*, 831 F.2d 1017, 1023 (Fed. Cir. 1987).

describes an embodiment in which the network addresses are automatically assigned by the central processing system. Plaintiff's proposed definition of "other network devices" does not render claim 12 superfluous because it contemplates only one manner in which the network address may assigned. The court therefore should construe the term "other network devices" to mean "devices, other than the central processing system, having unique network addresses and capable of communicating over a network."

RECOMMENDATION

The court should construe the disputed terms of claim 1 of the '252 Patent as follows:

- (a) the term "connector interface mounted to the housing" means a "component fixed to the housing of a safe that provides connectivity among various system components and network devices;"
- (b) the term "central system controller" means "a processor that is part of the safe, though not necessarily internal to the safe, which operates to control remote safes in the network;" and
- (c) the term "remote safe" means "an electronic lock and money collection/dispensing unit physically remote from a first such unit."

The court should construe the disputed terms of claim 11 of the '252 Patent as follows:

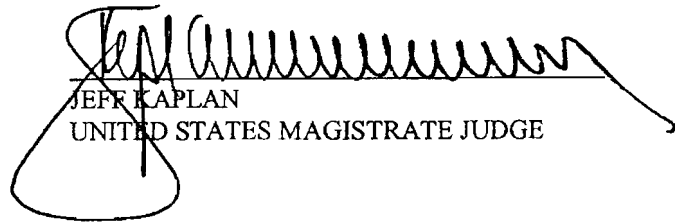
- (a) the term "integrated with" means "acting as part of;" and
- (b) the term "other network devices" means "devices, other than the central processing system, having unique network addresses and capable of communicating over a network."

The court should decline to construe the term "[a]n electronic lock and money control system," which appears in the preamble of claim 1, because the preamble has no significance to claim construction.

A copy of this report and recommendation shall be served on all parties in the manner provided by law. Any party may file written objections to the recommendation within 10 days after

being served with a copy. *See* 28 U.S.C. § 636(b)(1); FED. R. CIV. P. 72(b). The failure to file written objections will bar the aggrieved party from appealing the factual findings and legal conclusions of the magistrate judge that are accepted or adopted by the district court, except upon grounds of plain error. *See Douglass v. United Services Automobile Ass'n*, 79 F.3d 1415, 1417 (5th Cir. 1996).

DATED: April 16, 2008.



JEFF KAPLAN
UNITED STATES MAGISTRATE JUDGE